REMARKS

This amendment is amended in a manner to place the application in condition for allowance.

Status of the Claims

Claim 61-63 are new.

Support for claim 61 may be found, for example, on page 10, lines 13-26 in light of page 7, lines 10-12, page 12, lines 29-31.

Support for claim 62 may be found on page 10, lines 20-23.

Support for claim 63 may be found on page 9, lines 28-30.

Claims 18, 21-25, 30, 31, 36-40, 42-44, 48, 57, 58 and 60-63 remain pending.

Claims 22, 24, and 25 stand withdrawn for being directed to non-elected subject matter.

Claim Rejections-35 USC §103

Claims 18, 21 30, 31, 36-40, 42-44, 48, 57 and 58 stand rejected under 35 U.S.C. 103(a) as being unpatentable over BEILFUSS et al. U.S. 2001/0021711 A1 (BEILFUSS) in view of ECANOW et al. US 4,452,780 (ECANOW).

Claim 23 stands rejected under 35 U.S.C. 103(a) as being unpatentable over BEILFUSS in view of ECANOW and as evidenced by "Grotan BK" on CHEMINDUSTRY.COM (CHEMINDUSTRY).

These rejections are respectfully traversed for the reasons that follow.

The position maintained in Official Action was that it would have been obvious to add urea taught by ECANOW to the composition of BEILFUSS, as there would have been a reasonable expectation that said urea would impart effective fungicidal properties. BREYER et al. US 5,684,118 (BREYER) was cited as evidence to support the assertion that urea is a well known formaldehyde scavenger.

There are multiple reasons for which the proposed combination fails to render obvious the claimed invention.

I. The cited documents do not share the same intended use.

BEILFUSS implicitly teaches the formaldehyde emission of N-formaldehyde donor in [0013] when BEILFUSS proposes to limit the decomposition of the liquid preparation under practical conditions.

To solve this problem BEILFUSS teaches the use of stabilizers.

ECANOW does not deal with formaldehyde emission, and BREYER is dealing with scavenging formaldehyde using a low mole melamine-urea-formaldehyde resin composition.

BREYER is dealing with the manufacturing of boards.

Consequently, to reach the present invention, one of ordinary skill in the art would have had to start from BEILFUSS. However, the skilled person would have found no incentive in this document to combine it with ECANOW, which is concerned with iodine-based preparations, because BEILFUSS does not care about iodine preparations and EACANOW does not care about formaldehyde emission.

BEILFUSS would not have read BREYER which deals with formaldehyde emission, but it in the context of the melaminated boards manufacturing, and which teaches the addition of urea in a formaldehyde based resin, which has nothing to do with the preservative according to the present invention.

Thus, there can be no reason to look to ECANOW and BREYER to modify BEILFUSS.

II. BEILFUSS and ECANOW differ by composition and their requirements for fungicides.

ECANOW discloses a composition which is mainly water, i.e., an aqueous composition comprising 10-40% weight per volume of urea. This composition is the final product "which possesses

antiseptic, bactericidal, germicidal, fungicidal and viricidal properties". (See, e.g., column 4, lines 23-48, column 3, lines 24-26 and column 5, lines 10-13).

BEILFUSS, however, discloses a composition that is anhydrous, or at least has a low content of water ([0024]). This composition, however, is not in need of the fungicide, but rather this composition includes the fungicide to treat an industrial product. The composition is effective to treat the industrial product in amounts of 0.01 to 10%. ([0017]). BEILFUSS discloses that the selection of the fungicide is important due to potential incompatibilities ([0005]).

As urea is neither disclosed nor suggested as an equivalent to the fungicides in BEILFUSS for the same purpose as BEILFUSS, there would have been no predictable result and no expectation of success in using urea based on ECANOW and BEILFUSS alone.

Indeed, this non-equivalence is further evidenced by the amount of fungicide required in both documents. As noted above, ECANOW teaches that urea is effective at 10-40% in the final product. BEILFUSS, however, discloses an effective amount is 0.01 to 10%, which includes both the fungicide and N-formal. That is, in order to achieve a desirable result from urea, ECANOW suggests that one must exceed the total amount of preservative taught by BEILFUSS.

Thus, one would have been discouraged from making the substitution given that the selection of the fungicide is important concerning its effect on the active ingredient.

III. The combination of BEILFUSS and ECANOW fails to teach the claimed range and reduction of formaldehyde.

The Official Action asserted that it have been obvious to one of ordinary skill in the art at the time the invention was made to optimize the composition and include the particular percentages claimed by applicant.

However, even if one were to combine the teachings of ECANOW and BEILFUSS, there is no suggestion to optimize the resulting composition to arrive at the claimed invention and the disclosed results.

In light of the discussion above in I., at best, the combination teaches adding 10-40% urea to an industrial product, not to about 1% to about 10% to composition comprising about 90% to about 90% of the recited N-formal.

Indeed, there is no suggestion of adding an amount as recited in claims 18, 42, 43, 44, 48 and new claim 60 to reduce the formaldehyde emission of such a composition. See, e.g., Table of the specification.

Thus, the proposed combination of BEILFUSS and ECANOW fails to provide any guidance for optimizing the amount of urea to be added to the preservative composition of BEILFUSS to even

approach the claimed composition, and the combination fails to suggest the result of reduced formaldehyde emission.

IV. One would have been discouraged from adding urea to BEILFUSS in light of BREYER.

BREYER was not included as part of the ground of rejection. However, even if one had BREYER when considering the modification of BEILFUSS, BREYER does not provide guidance to approach the claimed invention.

BREYER was mentioned as evidence that urea controls formaldehyde emissions from resins by reducing free formaldehyde content in the uncured resin. That is, by reducing the free formaldehyde in the composition, the emission of formaldehyde during heating/curing of the resin is reduced. See, e.g., lines 41-50 of column 1 of BREYER.

BEILFUSS discloses that the active ingredient content, which may be negatively impacted by some fungicides, impacts the effectiveness of the composition ([0005]):

> However, incompatibilities are frequently found between N-formals and fungicides, which are evident from the decrease in active ingredient content, resulting in inadequate effectiveness. These problems arise irrespective of where the components N-formal and fungicide are added to the industrial products simultaneously or separately, i.e., during storage of the preservative and in the product treated therewith. (Emphasis added.)

As discussed relative to the prior art in the present specification, the formaldehyde content from the N-formal, such as in GROTAN BK as taught by CHEMINDUSTRY, in a preservative for industrial products impacts the efficacy:

> Grotan WS is, due to the lower content of formaldehyde, somewhat less effective than Grotan BK, and is also more odour-intensive and significantly more expensive than Grotan BK. (Specification page 5, lines 7-10.) Emphasis added.
>
> The biocidal effectiveness [of commercial products Mar 71 or Grotan OX or GrotaMar 71] is very good due to the comparatively high formaldehyde content. However, the odour is perceived as a disadvantage during use. In particular, the pungent odour reminiscent of formaldehyde and the formaldehyde emission have been criticized. (Specification page 5, lines 19-24.) Emphasis Added.

Thus, in light of the function of urea taught by BREYER, one would have been strongly discouraged from adding urea to the composition of BEILFUSS as a fungicide, as one would have expected a reduction in formaldehyde content of or the active ingredient content.

If proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984).

V. The combination fails to suggest the new features of claims 61-63.

In claim 61, for example, the weight of the water is up to about 1% of the preservative. While BEILFUSS includes a low water content, ECANOW includes 10-40% weight per volume. Accordingly, ECANOW fails to suggest a solution for a preservative of up to about 1% of water.

Moreover, the combination fails to suggest the beneficial results of such a low level of water. As evidenced by

the present specification, in the paragraph following the results of table 1, in anhydrous formulations the formaldehyde content in the gas phase is significantly and permanently reduced from an urea content of about 2% by weight.

In claim 62, the amount of urea is recited as about 1% to about 5% by weight. This percentage by weight of urea, e.g., as described in the examples of the present application, is not equivalent to the 5% by weight to volume in ECANOW (e.g., column 4, line 61). Accordingly, the combination cannot teach the claimed percentage by weight.

In claim 63, the preservative comprises no hydrolyzable polymeric resins. This is not taught by the combination.

Therefore, the reasons above, the proposed combination of BEILFUSS and ECANOW (with or without BREYER) fails to render obvious independent claim 18, and dependent claims 21-25, 30, 31, 36-40, 42-44, 48, 57, 58 and 60, as well as new claims 61-63.

Conclusion

In view of the amendment to the claims and the foregoing remarks, this application is in condition for allowance at the time of the next Official Action. Allowance and passage to issue on that basis is respectfully requested.

Should there be any matters that need to be resolved in the present application, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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